

NASA TECH BRIEF

NASA Pasadena Office



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A General Purpose Maneuver Turns Computer Program

The problem:

A program was needed to calculate general purpose maneuver turns for spacecraft.

The solution:

This program computes the maneuver turns required to point a given spacecraft-fixed vector in the direction of a given inertially-fixed vector.

How it's done:

In this program any two-turn maneuver sequence may be arbitrarily chosen. If it is not possible to accomplish the desired orientation with a two turn sequence, a three-turn sequence can be specified. In addition, the coordinates of an arbitrarily selected inertially-fixed reference vector are computed before and after each turn that is performed. Two program options provide the reference vector coordinates throughout each turn at selected points and the reference vector

positions before and after each turn of an arbitrarily prescribed set of maneuver turns.

Notes:

1. This program was written in FORTRAN V language for UNIVAC-1108 computer.
2. Inquiries concerning this program should be directed to:

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